AMENDMENTS TO THE CLAIMS

1.   (Currently Amended) A layered network node which is provided in a network consisting of one or a plurality of layers, comprising:

means for mutually interchanging with other nodes link state information about a ~~the~~ present node and links which are connected to the present node ~~(hereinafter termed "link-state information")~~;

means for storing the link state information for one or for all of the nodes within said network which has been obtained by said ~~this~~ interchanging means;

means for selecting a path for a Label Switch Path (LSP) ~~an LSP~~ of one or a plurality of types of layer, based upon the link state information which has been stored in said storing means according to an LSP establishment request; and

means for changing the path which has been selected and established by said ~~this~~ selection means, according to an LSP change request, based upon the link state information which has been stored in said storing means,

wherein the network to which said node belongs is a layered network, the layered network comprises virtual networks of a plurality of levels, each of the virtual networks belonging to each level comprises one or a plurality of virtual nodes belonging to the each level, each of the virtual nodes serves as a cell, each cell comprises one or a plurality of nodes, a virtual node in a virtual network belonging to a lower level, which is a level other than the highest level, is a node in a virtual network belonging to a level higher than the lower level, and if ~~links~~ a link exist[[s]] which connect[[s]] between different virtual nodes of the same level or of different levels, the border between the link and each of the different virtual nodes is an interface of each of the different virtual nodes ~~the interiors of the virtual nodes and the exterior, the contact points between these interiors of the virtual nodes and the exterior are interfaces of the virtual nodes~~,

and the layered network node further comprises a link state database

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